

2 The invention claimed is:

- 3 1. Joints for constructing a shear wall, comprising:
4 a bracket;
5 wherein said bracket is integrally formed with said shear wall;
6 wherein said bracket is for attaching said shear wall to a
7 substrate; and
8 wherein said bracket is for preventing uplift of said shear wall.
- 9 2. The joints as defined in claim 1, wherein said bracket consists of:
10 a) a base; and
11 b) a pair of side walls;
12 wherein said base of said bracket is for abutting against the
13 substrate;
14 wherein said base of said bracket has a pair of longitudinal edges;
15 and
16 wherein said pair of side walls of said bracket extend upwardly from
17 said pair of longitudinal edges of said base of said bracket,
18 respectively, so as to allow said bracket to have a generally and
19 substantially U-shape in lateral cross section.
- 20 3. The joints as defined in claim 2, wherein said base of said bracket
21 has a pair of through bores; and
22 wherein said base of said bracket is for affixing to the substrate.
- 23 4. The joints as defined in claim 2, wherein each side wall of said
24 bracket has a plurality of through bores.
- 25 5. The joints as defined in claim 4; further comprising a track wall;
26 wherein said track wall functions as a sole plate;

1 wherein said track wall functions as a top plate;
2 wherein said track wall consists of:
3 a) a base; and
4 b) a pair of side walls;
5 wherein said base of said track wall has a pair of longitudinal
6 edges;
7 wherein said base of said track wall has a pair of through bores;
8 wherein said pair of through bores in said track wall align with
9 said pair of through bores in said base of said bracket; and
10 wherein said pair of side walls of said track wall extend upwardly
11 from said pair of longitudinal edges of said base of said track
12 wall, respectively, so as to allow said track wall to have a
13 generally and substantially U-shape in lateral cross section.

- 14 6. The joints as defined in claim 5, wherein said track wall sits in
15 said bracket so as to allow said bracket to capture said track wall.
- 16 7. The joints as defined in claim 5, wherein said base of said track
17 wall abuts against said base of said bracket.
- 18 8. The joints as defined in claim 5, wherein said side walls of said
19 track wall abut against said side walls of said bracket,
20 respectively.
- 21 9. The joints as defined in claim 5; further comprising a base plate;
22 wherein said base plate sits in said bracket.
- 23 10. The joints as defined in claim 9, wherein said base plate abuts
24 against said base of said track wall.
- 25 11. The joints as defined in claim 9, wherein said base plate has a pair
26 of through bores;

1 wherein said pair of through bores in said base plate align with
2 said pair of through bores in said base of said track wall,
3 respectively; and

4 wherein said pair of through bores in said base plate align with
5 said pair of through bores in said base of said bracket,
6 respectively.

7 12. The joints as defined in claim 11; further comprising a stud;
8 wherein said stud extends from said bracket.

9 13. The joints as defined in claim 12, wherein said stud has an end;
10 wherein said end of said stud abuts against said pair of side walls
11 of said bracket;

12 wherein said end of said stud is affixed to said pair of side walls
13 of said bracket;

14 wherein said end of said stud abuts against said base of said track
15 wall when said base plate is not present so as to allow said base
16 of said track wall to distribute the load of said stud to said
17 bracket; and

18 wherein said end of said stud abuts against said base plate when
19 said base plate is present so as to allow said base plate to
20 distribute the load of said stud to said track wall and ultimately
21 to said bracket.

22 14. The joints as defined in claim 2; further comprising at least two
23 diagonal braces;

24 wherein said at least two diagonal braces extend diagonally
25 outwardly from said bracket.

26 15. The joints as defined in claim 14, wherein each of said at least two
27 diagonal braces abuts against a respective side wall of said
28 bracket; and

- 1 wherein each of said at least two diagonal braces is affixed to said
2 respective side wall of said bracket.
- 3 16. The joints as defined in claim 14, wherein each of said at least two
4 diagonal braces is flat.
- 5 17. The joints as defined in claim 14, wherein each of said at least two
6 diagonal brace has an end; and
7 wherein said end of each of said at least two diagonal braces has
8 a plurality of through bores.
- 9 18. The joints as defined in claim 17, wherein said plurality of through
10 bores in said end of each of said at least two diagonal braces align
11 with corresponding through bores in said respective side wall of
12 said bracket.
- 13 19. The joints as defined in claim 5, wherein one joint is an
14 intermediate base joint;
15 wherein the substrate is a concrete foundation;
16 wherein said track wall extends outwardly from both ends of said
17 base of said bracket;
18 wherein said pair of through bores in said base of said bracket,
19 said pair of through bores in said track wall, and said pair of
20 through bores in said base plate receive a pair of anchor bolts
21 extending upwardly out of the concrete foundation that ultimately
22 receive a pair of nuts, respectively;
23 wherein said stud extends centrally upwardly from said base plate
24 so as to be straddled by said pair of nuts; and
25 wherein said at least two diagonal braces are four, a pair of each
26 extending from each side wall of said bracket, diagonally outwardly
27 in opposite directions.

- 1 20. The joints as defined in claim 5, wherein one joint is an end base
2 joint;
3 wherein the substrate is a concrete foundation;
4 wherein said track wall extends outwardly from an outermost end of
5 said base of said bracket;
6 wherein only an outermost one of said pair of through bores in said
7 base of said bracket, an aligned one of said pair of through bores
8 in said track wall, and an aligned one of said pair of through bores
9 in said base plate receive an anchor bolt extending upwardly out of
10 the concrete foundation that ultimately receives a nut;
11 wherein said stud extends upwardly from an outermost end of said
12 base plate; and
13 wherein said at least two diagonal braces extend diagonally
14 inwardly.
- 15 21. The joints as defined in claim 5, wherein one joint is a ceiling and
16 floor joint;
17 wherein the substrate is an upper header and a lower header that are
18 spaced-apart by floor joists and a stud;
19 wherein two brackets are utilized;
20 wherein said base of one bracket is for abutting against said upper
21 header;
22 wherein said base of the other bracket is for abutting against the
23 lower header;
24 wherein said other bracket is in alignment with said one bracket;
25 wherein two track walls are utilized;
26 wherein one track wall extends outwardly from both ends of said base
27 of said one bracket;
28 wherein the other track wall extends outwardly from both ends of
29 said base of said other bracket;
30 wherein said through bores in said base of said one track wall, said
31 pair of through bores in said base of said one bracket, a pair of

1 through bores in the upper header, a pair of through bores in the
2 lower header, said pair of through bores in said base of said other
3 bracket, and said pair of through bores in said base of said other
4 track wall receive a pair of through bolts;
5 wherein two studs are utilized;
6 wherein one stud extends centrally upwardly from said base of said
7 one track wall so as to be straddled by said pair of through bolts;
8 wherein said one stud is aligned with the stud of the substrate;
9 wherein the other stud depends centrally from said base of said
10 other track wall so as to be straddled by said pair of through
11 bolts;
12 wherein the other stud is aligned with the stud of the substrate;
13 and
14 wherein said at least two diagonal braces are eight, a pair of each
15 extend from each side wall of each bracket, diagonally outwardly in
16 opposite directions.